



## **STATE OF COLORADO**

### **CLASS SERIES DESCRIPTION**

**July 1, 2002**

### **AIR ENVIRONMENTAL SYSTEMS TECHNICIAN**

I5A1TX TO I5A2XX

#### **DESCRIPTION OF OCCUPATIONAL WORK**

This class series uses two levels in the Physical Science and Engineering Occupational Group and describes technical electronic and automotive testing, calibration, inspection, certification, and training services for air emissions planning and control. The work consists of supporting testing or field operations of automotive emissions control plans, devices, or training and education programs.

Work in emissions testing entails the planning, conduct, analysis, and reporting on mass emissions tests of automotive electronic equipment designed to control or monitor auto emissions in the atmosphere. The work in field operations includes responsibility for performing technical evaluations of vehicles or fleets and inspecting emission-producing facilities for compliance with emission control rules and regulations. The work entails providing information to the public on emissions programs and training for certification of inspectors of emission control test facilities. The Emissions Compliance Inspector differs from this series as that series describes inspection of vehicle testing stations for compliance with regulations.

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### **AIR ENVIRONMENTAL SYSTEMS TECHNICIAN I      I5A1TX**

#### **CONCEPT OF CLASS**

This class describes the fully-operational level. Positions in this level conduct inspections of automotive fleet self-certification programs, gasoline distribution facilities, and individual vehicles under the testing complaint resolution program. Positions use electronic test equipment and specifications to inspect and calibrate emission test equipment through the use of scanners, meters, computers, analyzers, and dynamometers. Positions use their knowledge of computerized engine

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management systems to advise the public and manufacturers on the state's emission requirements. Some positions participate in testing of new emissions devices or monitoring systems for planning air quality programs or assisting manufacturers in meeting new air quality standards. The positions also provide education and training on emissions programs through literature and courses. This level includes those positions receiving orientation and training to the agency setting where performance is expected to reach the fully-operational level within the initial probationary period.

**FACTORS**

**Allocation must be based on meeting all of the four factors as described below.**

**Decision Making --** The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions decide what corrections are needed to bring emissions equipment into compliance with regulations. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide when proposed engine management devices will comply with future emission control standards.

**Complexity --** The nature of, and need for, analysis and judgment is patterned, as described here. Positions study technical automotive emissions information to determine what it means and how it fits together in order to get practical solutions in the form of test results. Guidelines in the form of technical manuals, specifications, and air quality regulations exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions analyze emission data to select the best control devices to recommend to the public.

**Purpose of Contact --** Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, field positions detect emission violations when inspecting facilities.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, when vehicles or fleets are found to be out of compliance, positions may impose sanctions against repeated violations.

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**Line/Staff Authority** -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

**AIR ENVIRONMENTAL SYSTEMS TECHNICIAN II**      I5A2XX

**CONCEPT OF CLASS**

This class describes the supervisory or senior authority level. In addition to work described in the previous class, positions in this level have administrative oversight for units which includes some responsibility for allocated budgets, equipment maintenance, facility management, and, for decisions which affect the pay, status, or tenure of others. This class also describes those unique positions functioning as senior authorities in their field of expertise. Managers and peers rely on such positions for advice on emission specifications or air quality programs. This class differs from the Air Environmental Systems Technician I in the Line/Staff Authority factor and possibly on the Decision Making and Purpose of Contact factors.

**FACTORS**

**Allocation must be based on meeting all of the four factors as described below.**

**Decision Making** -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions choose the best technical operating performance levels to use when evaluating emission control devices.

**OR**

The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system. For example, when designing

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operations tests of new emission control devices, positions analyze environmental operating parameters and decide the appropriate test methodologies and measurement standards under which to perform the test.

**Complexity --** The nature of, and need for, analysis and judgment is patterned, as described here. Positions study air quality program and test report information to determine what it means and how it fits together in order to get practical solutions in the form of unit operations and air quality equipment or program evaluations. Guidelines in the form of regulations, equipment specifications, and technical directives exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate emission standards to apply to mixed-type, manufacturing facilities.

**Purpose of Contact --** Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions examine operating conditions to detect reasons for equipment failures which violate emission standards.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise emission control device manufacturers on equipment susceptibility to failure or reliability.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions train others on licensing requirements for emission testing equipment operators.

**Line/Staff Authority --** The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

**OR**

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The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise.

**ENTRANCE REQUIREMENTS**

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

**CLASS SERIES HISTORY**

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 7/1/00 (DLF). Emission Compliance Inspector (D4H1-2) consolidated as part of the LTC consolidation study. Draft published 3/31/99, proposed 5/24/99, and final 7/1/99.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93.

Revised 7/1/86. Changed relationships (A2540-42).

Created 7/1/83. Automotive Environmental Systems Technician (A2540-42).

**SUMMARY OF FACTOR RATINGS**

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Air Environ Systems Tech I	Operational	Patterned	Detect or Secure	Indiv. Contributor
Air Environ Systems Tech II	Operational or Process	Patterned	* Detect, Advise, or Clarify	Unit Supervisor or Senior Authority

**\* Must have 2 of 3.**

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ISSUING AUTHORITY: Colorado Department of Personnel & Administration